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## CLAIMS

1. Resistor array comprising N lines of  
commands  $N_i$ , with i being a strictly positive integer,  
M columns of commands  $M_j$ , with j being a strictly  
5 positive integer, and NM resistors  $R_{ij}$ , each resistor  
 $R_{ij}$  being commanded by the line  $N_i$  and the column  $M_j$ ,  
wherein at least one of the resistors  $R_{ij}$  has a negative  
thermal coefficient resistance and is associated with a  
thermally activatable component, characterised in that  
10 it has means for adjusting the time for which the  
command voltage is applied to at least one of the  
resistors  $R_{ij}$ , in particular to each resistor  $R_{ij}$ , so as  
to obtain the desired output.

15 2. Array according to claim 1,  
characterised in that each resistor  $R_{ij}$  is associated  
with a thermally activatable component.

20 3. Array according to one of claims 1 or 2,  
wherein at least one of the activatable components is a  
microvalve.

25 4. Array according to one of claims 1 to 3,  
wherein all of the resistors  $R_{ij}$  have negative thermal  
coefficient resistances.

30 5. Array according to one of claims 1 to 4,  
characterised in that at least one of the negative  
thermal coefficient resistors is made of a single  
material.

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6. Array according to claim 4,  
characterised in that all of the negative thermal  
coefficient resistors are made of a single material.

5 7. Array according to one of claims 1 to 6,  
characterised in that all of the resistors are  
identical.

8. Array according to one of the previous  
10 claims, wherein the negative thermal coefficient  
resistor includes tantalum nitride, a nickel-chromium  
alloy, or a nitride from refractory material.

9. Array according to one of the previous  
15 claims, wherein the negative thermal coefficient  
resistor has a temperature coefficient of between -100  
and -3000 ppm/°C.

10. Array according to any one of claims 1  
20 to 9, characterised in that the material used for at  
least one line and/or at least one column has a  
positive thermal coefficient resistance.

11. Array according to claim 10,  
25 characterised in that all of the lines and/or all of  
the columns are made of a material with a positive  
thermal coefficient resistance.

12. Array according to one of claims 1 to  
30 11, characterised in that all of the lines and all of  
the columns are made of the same material.

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13. Array according to one of claims 1 to 12, which is associated with an insulating substrate.

14. Method for producing a resistor array,  
5 wherein at least one of the resistors is obtained by placing a resistive material (16), of which the resistance has a negative thermal coefficient, on a substrate (10), including the association of this resistor with a thermally-activatable component, and  
10 including the association of at least one resistor with means for adjusting the time for which the command voltage is applied.

15. Production method according to claim 14,  
15 including the deposition of the resistive material by cathode sputtering.

16. Production method according to one of claims 14 or 15, including the deposition of a  
20 conductive material (12) on the substrate (10) so as to form lines (14) before the resistive material is deposited.

17. Production method according to one of  
25 claims 14 to 16, including the deposition of a conductive material (12) so as to form columns (24) after the resistive material has been deposited.

18. Method according to one of claims 14 to  
30 19, including a step of depositing a material (20) insulating the lines from the columns on said substrate.

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19. Method according to one of claims 14 to 18, including the choice of a material of which the resistance has a positive thermal coefficient for the lines and/or columns.

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20. Method according to one of claims 14 to 19, including the association of the array with a microvalve array.

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21. Device for biological use, including an array according to one of claims 1 to 13, associated with a microfluidic array.